histricalis, Moore, and *pubescens*, Warr.; all the three white spots more largely developed, the additional basal spot also conspicuous; the outer line, which in both of the above-mentioned species forms a slight but visible projecting sinus between the two outer spots, runs straight, and is followed by an additional white blotch consisting of three coalescent teeth. Hind wings whitish from base, becoming ochreous fawn-colour towards hind margin, but not yellowish. The fore wings have the apex more produced, subfalcate, and the hind margin is slightly elbowed in the middle.

Expanse of wings 24 millim.

Several of both sexes from Tenimber and Dili.

[To be continued.]

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

February 26, 1896.—Dr. Henry Hicks, F.R.S., President, in the Chair.

The following communications were read:—

1. 'On the Structure of the Plesiosaurian Skull.' By Charles W. Andrews, Esq., B.Sc., F.G.S.

Owing to the imperfection of the specimens described, various previous accounts of the Plesiosaurian skull are incomplete, and differ from one another in important particulars. There is in the National Collection a fine skull of *Plesiosaurus macrocephalus* which has lately been cleared from the matrix, with a description of which the present communication is mainly occupied, though other specimens, which are of assistance in clearing up some difficulties, are also noticed. The Author particularly considers the structure of the palate, and only such points in the structure of the rest of the skull as add to or are at variance with previous descriptions are considered.

The Author's observations indicate that a general similarity of palatal structure among reptiles does not necessarily imply any close relationship, but the very great resemblances existing between the Plesiosaurian and Rhynchocephalian palates, reinforced by numerous other points of resemblance in these skeletons noted by Baur, lead to the conclusion that the Plesiosauria are descended from a primitive Rhynchocephalian reptile, as already opined by Baur, Boulenger, and others.

2. 'The Fauna of the Keisley Limestone.—Part I.' By F. R. Cowper Reed, Esq., M.A., F.G.S.

The Author has examined a very full series of fossils from the Keisley Limestone of Westmoreland, and proposes to describe the fauna of the limestone. In this (first) part of the paper a description of the trilobites is given. He recognizes about forty species, belonging to ten families. Several of the forms are new, whilst others have previously been described, and many of them occur in the limestone of the Chair of Kildare and the *Leptæna*-limestone of Dalecarlia.

April 29, 1896.—Dr. Henry Hicks, F.R.S., President, in the Chair.

The following communications were read:—

1. 'Descriptions of New Fossils from the Carboniferous Limestone.—I. On *Pemmatites constipatus*, sp. nov., a Lithistid Sponge. II. On *Palæacis humilis*, sp. nov., a new Perforate Coral; with Remarks on the Genus. III. On the Jaw-apparatus of an Annelid, *Eunicites Reidii*, sp. nov.' By George Jennings Hinde, Ph.D., F.G.S.

I. The *Pemmatites*, belonging to a genus hitherto only known from the Permo-Carboniferous beds of Spitzbergen, was discovered in the Yoredale Beds of Yorkshire by Mr. J. Rhodes, and is the only fairly complete sponge which has hitherto been detected in the Yoredale Beds of North-West Yorkshire. The Author gives a full description of the species.

II. The *Palæacis* was found by the Rev. G. C. H. Pollen in the Carboniferous Limestone and Shale Series, on the banks of the Hodder, near Stonyhurst. The specific characters of the form are given by the Author, who then remarks upon the genus *Palæacis*, which has been placed alternately with the corals and sponges, though latterly it has been generally regarded as a perforate coral. Nevertheless its real characters had not been definitely settled: the uncertainty, in the Author's opinion, being due to the fact that some writers have placed in the genus certain forms which differ widely from the typical species, and have then defined the characters of the genus largely from these foreign forms. The Author, in the light of the information now supplied, gives a fresh definition of the genus, which appears to represent a distinct family of perforate corals, in some features more nearly allied to the Favositidæ than to the Madreporidæ or Poritidæ.

III. The third specimen was discovered by Miss Margery A. Reid in the Lower Carboniferous Beds of Halkin Mountain, Flintshire, and is named in honour of its discoverer. A description of it is given, and it is stated that, notwithstanding certain peculiarities, the individual pieces correspond so closely with those of the recent *Eunice* family that it may well be included in the genus *Eunicites*.

2. 'Discovery of Mammalian Remains in the Old River-gravels of the Derwent near Derby.'—Part I. By H. H. Arnold-Bemrose, Esq., M.A., F.G.S.

A few mammalian bones were found in sinking a well at Allenton. On April 8th, 1895, the Authors commenced further excavations, and were successful in finding the lower jaw, 26 vertebræ, the os innominatum, left femur, tibia, fibula, calcaneum, cuboid, IV metatarsal, right fibula, calcaneum, cuboid, IV metatarsal, astragalus, left lunare and scaphoid, and portions of ribs of a *Hippopotamus*, also part of the breast-bone of an *Elephas*, and part of the tibia of a *Rhinoceros*. The *Hippopotamus*-bones were well-preserved, and probably belonged to one animal. The body was most likely stranded in an old channel of the River Derwent, and quickly covered up with sand and clay, but not before the bones were somewhat disturbed. They were found in a dark-coloured sand above the river-gravel, at a depth of 9 feet 8 inches below the surface.

Mr. Clement Reid found some twenty or more species of plant-remains in the sand. These plants 'indicate a moist meadow or swampy ground, and a temperate climate. The species are all widely distributed.'

Part II. By R. M. Deeley, Esq., F.G.S.

The deposits in which the bones were found occupy a wide trench which occurs on the inside edge of a gravel-terrace stretching for several miles south of Derby, at a height of 15 or 20 feet above the modern alluvial plain. The gravels are of later age than the Great Chalky Boulder Clay, and were formed at a time when the rivers were removing from their preglacial valleys the older Boulder Clays, with which they had been partially filled. Gravels of two ages are recognized: (*a*) recent gravels well stratified, undisturbed, and covered in many places by a thick layer of brick-earth: and (*b*) high-level gravels showing 'trail' and contorted bedding. It is in these latter gravels that the trench containing the mammalian remains occurs. The deposits occupying this old waterway and the contorted high-level gravels are placed together in the same period; and the Author gives reasons for supposing that they are both of interglacial age, the contortions and surface-disturbances having been produced during a recent cold period, most probably by a lobe of ice which passed down the Trent Valley. Several peculiar physical features of the valleys, such as the flowing surface-outlines of the higher gravel-terraces, and the occurrence of lacustrine deposits in the low-level area occupied by Sinfin Moor, are instanced as supporting this view.

MISCELLANEOUS.

On the Scaly Covering of the Regenerated Tails of Lizards. By Dr. Franz Werner, Assistant at the Zoological Institute and Royal University in Vienna.

The results of this research are as follows:—

1. The scales of the regenerated tail in certain Saurians, which